

SCRAPIE: ERADICATE IT

The sheep industry's scrapie eradication efforts.



American Sheep
Industry Association

APRIL 2021

The goal of the American Sheep Industry Association and the American sheep industry is to eradicate scrapie from our borders. In addition, it is ASI's objective to have the United States recognized as scrapie free in accordance with the World Organization for Animal Health. This publication is created specifically for those of you in the field who are also working to achieve this goal.

This newsletter brings together, into one spot, current information from all 50 states, as well as from the U.S. Department of Agriculture and any other organization providing scrapie news, and reports it back to the field. If you have first-hand accounts that you believe would be relevant for others to read or have information that you would like included in this newsletter, please email kyle@sheepusa.org.

ASI, APHIS Preparing for Use of Electronic Identification

Technology is beating on the American sheep industry's door, and this time the industry must answer.

In many places worldwide – such as the United Kingdom and in some parts of Australia – the sheep industry has moved to the use of electronic identification as the only form of official animal ID. The United States Department of Agriculture's Animal and Plant Health Inspection Service has recently proposed to only allow electronic ID tags as official identification for domestic cattle and bison.

This has led to ASI beginning to think about how the sheep industry would transition to electronic ID. At the 2020 ASI Annual Convention, the Animal Health Committee put plans in place for a small working group to develop a proposed transition plan from the traditional visual scrapie tags to electronic ones.

"This isn't an easy task," said Animal Health Committee Co-Chair Dr. Cindy Wolf of Minnesota. "When we first began to consider it, the industry said no. But it's become clear that we need to consider our own industry-guided plan for a transition to electronic ID.

"The main hurdle we're facing right now is convincing people that there is a way for this technology to operate at the speed of commerce," said Wolf, who also stressed the entire system needs to be affordable for producers and other users, and for markets and processing facilities, as

well. "This will be the only way it will be accepted as part of regular business."

The working group has learned that electronic ID is already used in sheep in many countries. For example, the United Kingdom currently requires electronic ID in all sheep and goats. When the UK was implementing mandatory electronic ID, it had several hurdles, but has since found ways to iron out those issues. Australia has also moved toward mandatory electronic ID in sheep, but rather than implementing a nationwide mandatory system it started first in one state – Victoria – which is a major sheep state.

Wolf said getting the industry to switch to using electronic ID is somewhat akin to the struggles of getting producers to use visual scrapie tags when first required in the early 2000s. Yet there are plenty of reasons to make the switch.

"It will lead to improved and more rapid traceability in the event of an animal disease outbreak. COVID-19 has shown us just how quickly a disease can disrupt business," she said. "If a human disease can cause such disruption for our industry, imagine what an animal disease like FMD could do."

Electronic ID might have benefits in the production arena, as well.

"I'm in a part of the country where it's often cold and

To view the National Scrapie Eradication Program current Monthly Report, prepared by the U.S. Department of Agriculture's Animal and Plant Health Inspection Service's Veterinary Services, go to https://www.aphis.usda.gov/animal_health/animal_diseases/scrapie/downloads/monthly_scrapie_report.pdf

dark when we're working with sheep. Sometimes those tags can be hard to read, even if you have young eyes. It's so easy to get the numbers mixed up," she said. "Switching to the electronic tags and a reader alleviates those problems and can speed up everything when you're working sheep."

In cases where inadequate labor is an issue, the use of electronic ID might have some benefits, including reducing the need to handle sheep to read tags. The cost of the tags – less than \$1 per tag in most cases – isn't prohibitive, but an electronic wand reader that will read the tags and send the data to management software can amount to a substantial up-front investment. Still, the short-term cost of the initial investment could be offset by the long-term reduction in employee costs, which would make the change worthwhile for some.

There might also be a learning curve that comes with adding technology to an operation that has maintained specific management practices for several decades. Currently, the federal regulations only require the numbers on official tags to be recorded when they are applied and when a health certificate is issued or official testing is conducted, so many producers could manage with an inexpensive paddle reader or by visually reading the tags to meet these requirements.

"I think people in our industry are beginning to realize the importance of this improved technology," Wolf said. "We really need a much better tracking system – for a lot of reasons – and this technology offers the best route."

Is USDA serious about moving to electronic ID for official identification purposes? It appears so. USDA recently sought input on a proposal to require electronic ID as the only allowed official ID for cattle and bison.

"USDA did receive support for the proposed change," Wolf said. "There is growing acceptance in the cattle industry for moving toward electronic ID. If they move in this direction, we expect there will be more pressure for other classes of livestock to utilize electronic ID."

This is the reason for establishing the Electronic ID Transition Plan working group within ASI. The group's purpose is to develop a transition plan that will guide producers who move in this direction.

"We hope to have a preliminary group report in the first quarter of 2021," Wolf said. "We'll follow up with an-

other report in October of 2021. At that point, we should have a proposed plan in place to transition to the electronic ID tags."

The sheep industry utilizes official USDA ID tags to comply with the National Scrapie Eradication Program. ASI and APHIS have worked together for 20 years to provide information and education to the sheep industry about the National Scrapie Eradication Program through APHIS-funded cooperative agreements.

This cooperative work includes scrapie newsletters from ASI and a comprehensive scrapie outreach program that supports education at the state level.

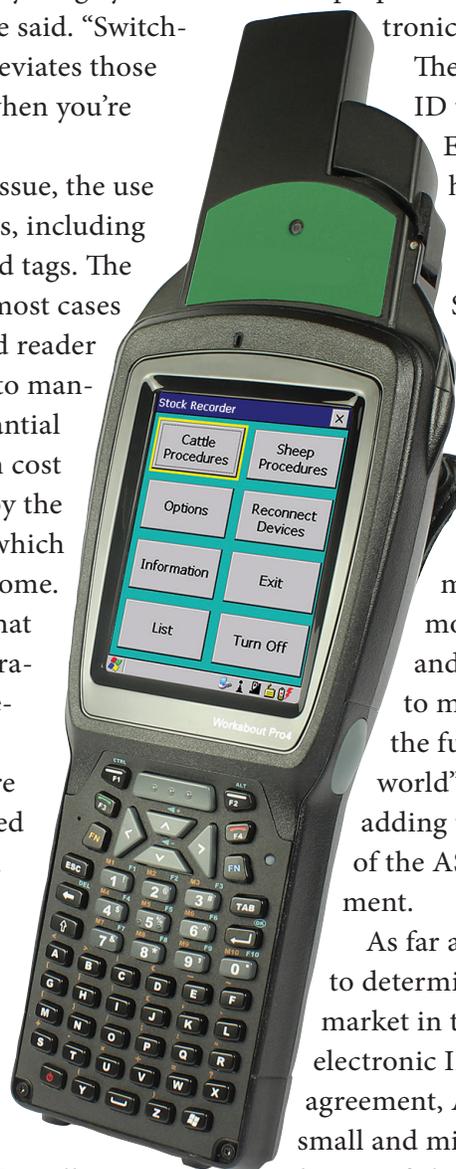
For the current cooperative agreement, ASI proposed to allocate some money toward quantifying the feasibility and benefits of using electronic ID in sheep to meet official ID requirements, especially the functionality of electronic ID in the "real world" setting of a sale barn. USDA approved adding the targeted focus on animal ID as part of the ASI scrapie outreach and education agreement.

As far as ASI representatives have been able to determine, there isn't a sheep or goat auction market in the United States that currently utilizes electronic ID technology. Through the cooperative agreement, ASI will work in collaboration with a few small and midsize sheep and goat markets to study the use of electronic ID tags in sheep in a fast-paced point-of-sale environment.

ASI will gather information about how data can be captured and transferred in a manner that meets the speed of commerce needs of the markets and the producers. In addition, ASI will gather information from producers, market operators and others on utilization of electronic ID to understand their expectations of this technology.

The agreement makes it possible for ASI to partner with a few markets and provide them with the necessary equipment, including tags, tag readers and system software to carry out this project. Planning for the pilot project is underway and is expected to begin in the coming weeks.

"The goal," Wolf said, "is to develop an industry-friendly system that protects producers from major business interruptions, ensures their continuity and provides value for producers and markets alike."



Animals Sampled for Scrapie Testing

Sheep and Goats

In Fiscal Year 2021, as of Feb. 28, 2021

12,097 animals have been sampled for scrapie testing: 11,569 RSSS and 528 on-farm samples

9,021 sheep and 3,076 goats

1 sheep tested positive for classical scrapie (sample collected in January 2021)

Regulatory Scrapie Slaughter Surveillance (RSSS) Statistics

Since April 1, 2003

680,190 samples collected

474 NVSL* confirmed positives for classical scrapie

*National Veterinary Services Laboratories

In FY 2021 (as of Feb. 28, 2021)

11,569 samples collected (2,833 from goats)

1 NVSL confirmed positive

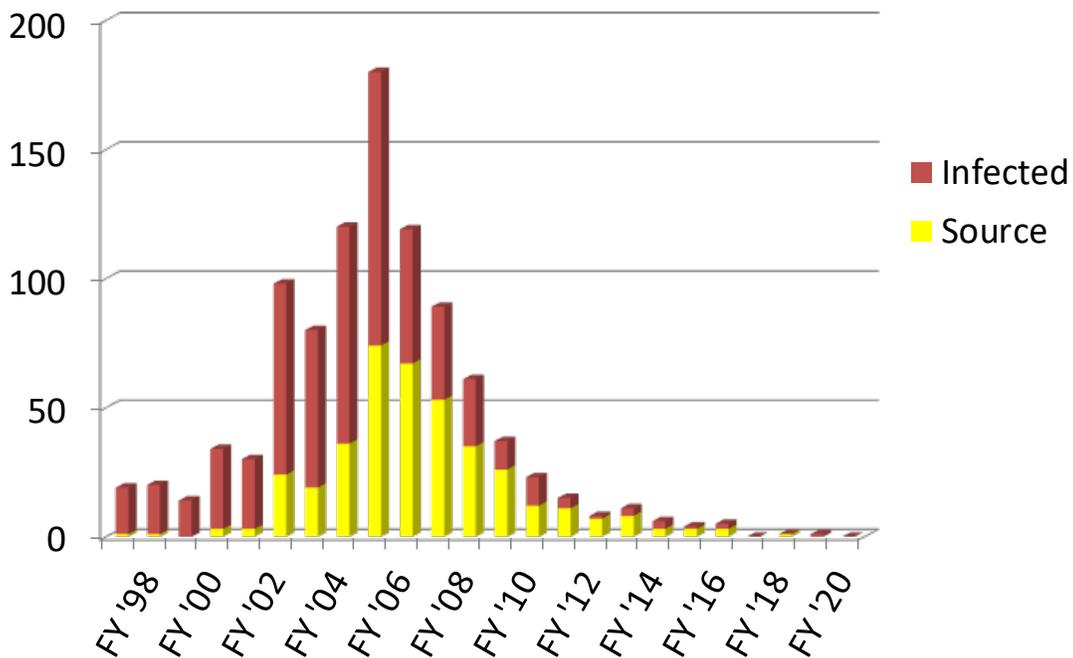
On-Farm Surveillance

In Fiscal Year 2021, as of Feb. 28, 2021

528 animals have been tested on farm – 285 sheep and 243 goats

Infected and Source Flocks

New Statuses by Year – Fiscal Years 1997 to 2021*

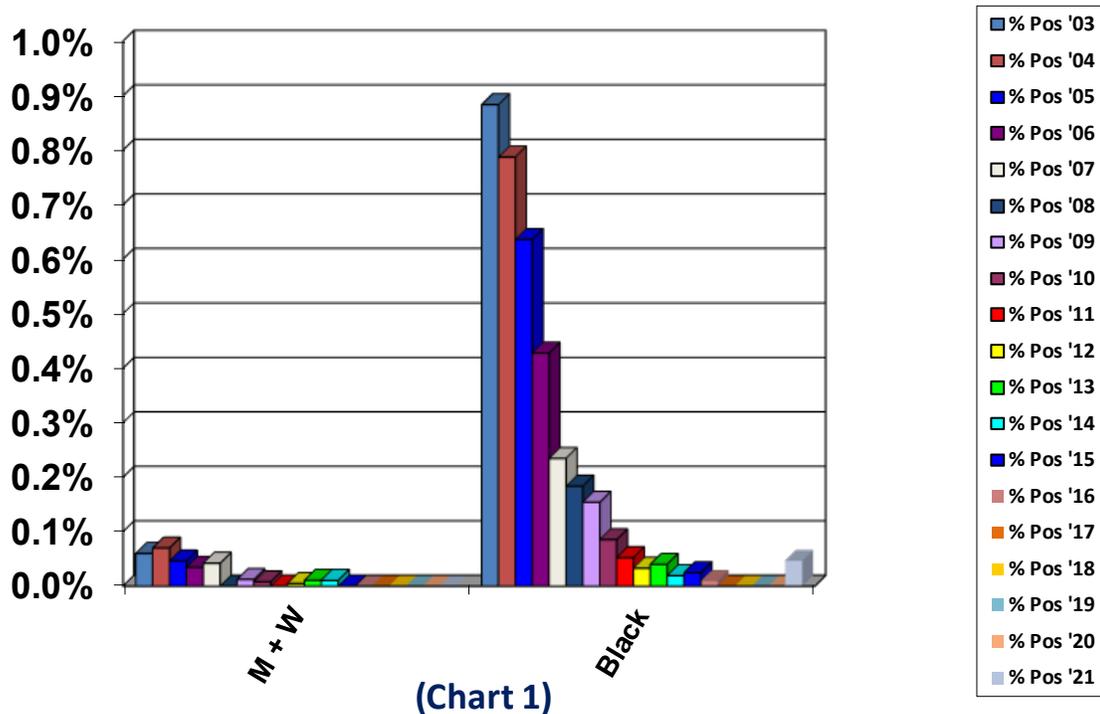


(Chart 3)

* As of February 28, 2021

Percent of RSSS Sheep Samples that Tested Positive for Classical Scrapie - By Face Color

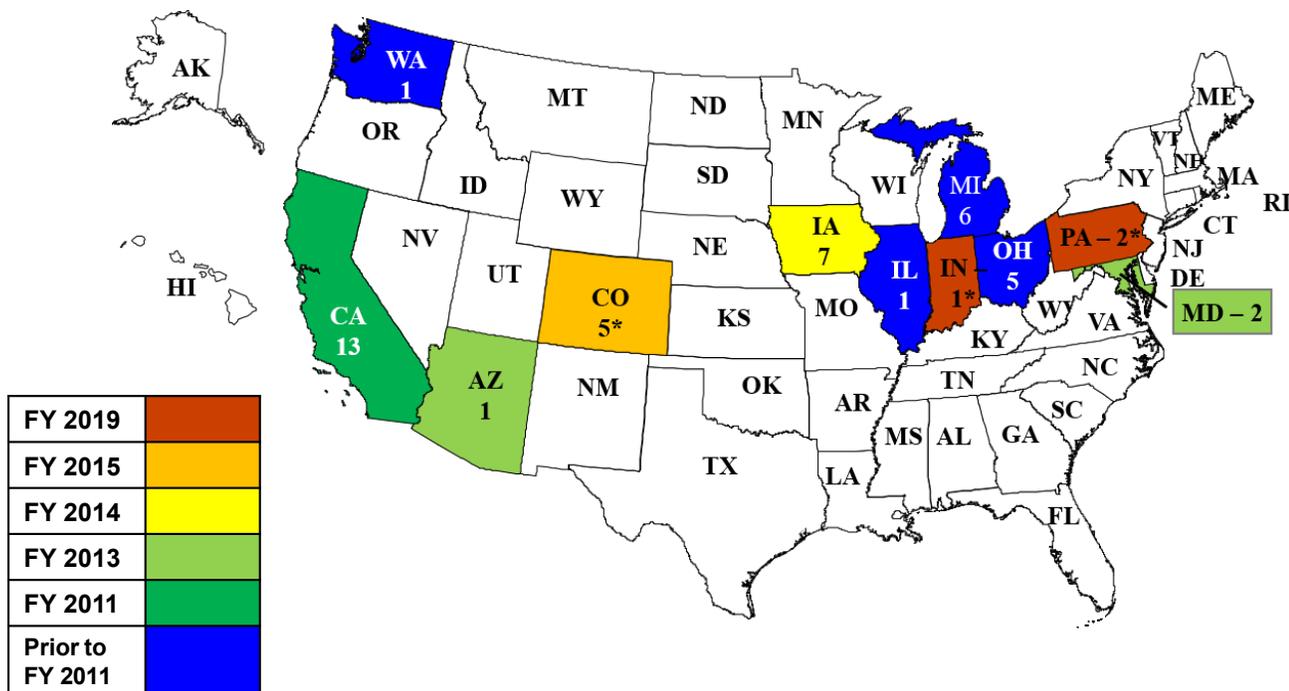
FY 2003 – FY 2021*



* As of February 28, 2021. Adjusted to exclude multiple positive animals from same flock. Mottled- and white-faced combined. Does not include Nor98-like scrapie cases found through RSSS.

Scrapie Cases in Goats

FY 2002 – FY 2021



(Figure 1)

Color code indicates fiscal year of last case by State. 44 NVSL confirmed cases.

* States with 1 RSSS positive goat; samples collected November 2014, July 2018, and June 2019

RSSS and On-Farm Surveillance Testing by Species FY 2021*

Species.. Type	Age Group			Grand Total	
	< 2 Yrs	2 to < 6 Yrs	6+ Yrs		
Goats	Dairy	28	1,155	20	1,203
	Fiber		19	1	20
	Meat	113	861	56	1,030
	Multipurpose	38	505	62	605
	Unknown	7	206	5	218
	Total	186	2,746	144	3,076
Sheep	Black Face	151	1,899	384	2,434
	Mottled <1% Black	3	428	3	434
	Mottled >1% Black	65	938	176	1,179
	White Face	107	3,728	280	4,115
	Other Sheep	93	660	83	836
	Unknown Sheep	6	17		23
	Total	425	7,670	926	9,021
Grand Total	611	10,416	1,070	12,097	

Number of Records
1  3,728

(Table 1)

* As of February 28, 2021. Darker shading represents greater number of animals tested that met targeting criteria.

Submitting Mature Heads

APHIS provides shipping boxes and labels for the submission of heads for scrapie testing at no cost to producers. Many veterinary diagnostic laboratories also accept heads for scrapie testing. To request a box or more information on sample submission, contact the veterinary services field office for your state. State contact information is available at https://www.aphis.usda.gov/animal_health/contacts/field-operations-districts.pdf. VS field offices can also be reached through the toll-free number at 866-873-2824.

Free ID For Producers

The National Scrapie Eradication Program provides up to 100 plastic tags free of charge to producers who have not received the free tags in the past (call 866-USDA-TAG to get tags). Markets may still get free metal tags through. Contact your state or local VS office for more information.

Websites Dedicated to the Eradication of Scrapie

Animal and Plant Health Inspection Service: <http://www.aphis.usda.gov/animal-health/scrapie>

Maryland Small Ruminant Page: <http://www.sheepandgoat.com/updatescrapie>

Scrapie SharePoint: <https://share.aphis.usda.gov/sites/vs-sgh/>

(Federal and State employees can access this password-protected site by emailing Diane.L.Sutton@aphis.usda.gov if you need assistance.)

